



333-2014 ADDENDUM 1

Contract 1 – Site Preparation Works – South End Water Pollution Control Centre (SEWPCC) Upgrading/Expansion Project

ISSUED: July 18, 2014
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URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Template Version: A20131129

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph ^ of Form A: Bid may render your Bid non-responsive.

PART A – BID SUBMISSION

Replace: 333-2014 Bid Submission with 333-2014 Addendum 1- Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

- Form B(R1): Change in quantities – Items No. A.3 i), A.6 i), A.15 i), and A.18 i)
- Form B(R1): Change in quantities – Items No. B.2, B.3, B.5 i), B.5 ii), B.6, B.8, B.10 i)
- Form B(R1): Change in quantities – Items No. C.1 through C.6 inclusive
- Form B(R1): Name change and Spec Reference added – Item No. C.6
- Form B(R1): Change in quantity – Item No. D.10
- Form B(R1): Name change - Items No. E.3 iii) a) and E.3 iv) a)
- Form B(R1): Name change and Spec Ref Reference added – Items E.4 i) a), E.4 i) b), E4 ii) a), E.4 ii) b)
- Form B(R1): Change in quantity - Items No. E.5 and E.6 i)
- Form B(R1): Added Spec Reference - Item No. E.7
- Form B(R1): Change in quantity - Items No. F.8 i) and F.11
- Form B(R1): Add Items No. F.21 to F.24 inclusive.

Page numbering on some forms may be changed as a result.

PART D – SUPPLEMENTAL CONDITIONS

Revise: D18.1(a) to read: Trailer pad preparation at northeast portion of site, including electrical feed and water supply line, to be completed ready to receive trailers by October 31, 2014. (Estimated date of arrival of City Supplied Trailers between October 1, 2014 and October 31, 2014)

- Revise: D18.1(b) to read: Temporary access road around west side of SEWPCC site from Sludge Hauling bay doors to Seniuk Road by October 31, 2014.
- Revise: D19.2(b) to read: Completion of all excavation and piling for the Bioreactors, Secondary Clarifiers, UV, Vortex Building, High Rate Clarification Building, Chemical and Generator Building, – June 8, 2015.

PART E – SPECIFICATIONS

- Revise: E1.3 to read: Add the following two drawings to the list of Structural drawings:

Drawing No. Drawing Name/Title

Structural

1-0102-SFDW-K001	High Rate Clarification Building – Piling Plan
1-0102-SFDW-K002	High Rate Clarification Building – Inlet Channel Piling Plan

- Add: E6.3: Abandonment of existing watermain shall be incidental to installation of new watermain. Any abandoned watermain encountered during excavation for building foundations shall be separated from the excavated material and disposed of off-site in accordance with E9.
- Revise: E9.3 to read: Disposal of excavated material into stockpiles shall be incidental to the cost of common excavation. Grading and maintenance of the stockpile shall be as indicated in E22.
- Add: E9.10: Disposal of abandoned watermain encountered during excavation shall be separated from material placed into stockpile and disposed of off-site. Separation of abandoned watermain from excavated material and disposal of abandoned watermain off-site shall be incidental to the cost of common excavation.
- Revise: E23.2 to read: Maintaining 24-hour site access shall include, but not necessarily be limited to, clearing snow and sanding all site roadways utilized by the City of Winnipeg in the course of their operation of the plant, as required during the winter months. This primarily refers to uninterrupted access to the site by sludge trucks 24-hours a day, but also includes access by any other vehicles required for operation of SEWPCC. The duration of maintaining SEWPCC site roadways shall be for the duration of the Contract and up to one month following completion of the Work within this Contract to facilitate transfer of maintenance of site roadways to the Contractor of a subsequent SEWPCC project contract.
- Revise: E28.3(c) to read: Seating Head: Maximum design seating head for all gates will be from horizontal centerline of the gate to the top of the gate chamber roof unless noted otherwise in the drawings.
- | | | |
|-------|------------|------------------|
| (i) | Chamber 4: | 3.66 m (12.0 ft) |
| (ii) | MH 1: | 2.60 m (8.5 ft) |
| (iii) | MH2: | 2.05 m (6.8 ft) |
| (iii) | MH3: | 2.05 m (6.8 ft) |

Revise: E28.3(d) to read: Unseating Head: Maximum design unseating head for all gates will be from horizontal centerline of the gate to the top of the gate chamber roof unless noted otherwise in the drawings.

- (i) Chamber 4: 3.66 m (12.0 ft)
- (ii) MH 1: 2.60 m (8.5 ft)
- (iii) MH2: 2.05 m (6.8 ft)
- (iii) MH3: 2.05 m (6.8 ft)

Revise: E28.3(h) to read: Gate Opening Sizes.

- (i) Chamber 4: 750 mm diameter (30")
- (ii) MH 1: 750 mm diameter (30")
- (iii) MH2: 600mm diameter (24")
- (iii) MH3: 750 mm diameter (30")

Revise: E28.3(m) to read: The slide gate shall be as manufactured by Hydro Gate, Rodney Hunt, Waterman, Armtec or approved equal.

Revise: E28.6.1 to read: Supply and delivery of a cast iron slide gate, wall thimble, stem, wall bracket(s) and accessories will be measured and paid for at the Contract Lump Sum Price for "Square Cast Iron Slide Gate for 750mm dia (30") Opening" or "Square Cast Iron Slide Gate for 600mm dia (24") Opening" respectively, executed in accordance with this specification and accepted by the Contract Administrator.

Revise: E28.6.2 to read: Installation and testing of a cast iron slide gate, wall thimble, stem, wall bracket(s), accessories, and installation of new anchor bolts will be measured and paid for at the Contract Lump Sum Price for the following:

- i) "Square Cast Iron Slide Gate for 750mm dia (30") Opening Inside Chamber 4 – Installation and Testing" for installation and testing of the slide gate in Chamber 4;
- ii) "Square Cast Iron Slide Gate for 600mm dia (24") Opening – Inside New Manhole" for installation and testing of a slide gate installed in new manhole MH2;
- iii) "Square Cast Iron Slide Gate for 750mm dia (30") Opening – Inside New Manhole" for installation and testing of slide gates installed in new manhole MH1 or MH3;

all executed in accordance with this specification and accepted by the Contract Administrator.

Revise: E29 in entirety with the following :

E29. CAST IRON FLAP GATES

E29.1 Description

This specification will cover the supply, delivery, shop testing and installation of cast iron flap gate and wall thimble.

E29.2 Submittals

- E29.2.1 Submit shop drawings of cast iron flap gate and wall thimble in accordance with specification section "01 33 00 Submittal Procedures" and E32.
- E29.2.2 Submit Operating and Maintenance Manuals in accordance with specification section "01 33 00 Submittal Procedures" and E32.
- (a) Provide five (5) copies of all the manufacturer's brochures and technical literature detailing correct installation procedure and recommend operating and maintenance instructions. Manuals shall be bound with the project title and gate description identified on the front cover. One set of manuals shall be provided for each size of gate. Final payment for flap gates will not be made until the above information has been provided to the Contract Administrator.
- E29.2.3 Provide the following information to the Contract Administrator prior to the delivery of flap gate in accordance with specification section "01 33 00 Submittal Procedures" and E32.
- (a) A certified copy of the Chemical and Physical Analysis on all materials used in the manufacture of the flap gate and wall thimble or certification that the materials used are in strict accordance with this specification.
- (b) Copies of the test reports for Performance and Leakage tests. Included on the report shall be the signature of the official who is responsible for the gate assembly and testing.
- E29.3 General Design
- (a) Type: Flange Back for mounting on a wall thimble.
- (b) Mounting: Type F wall thimble, cast iron
- (c) Seating Head Maximum design seating head (6.0 m) measured from the horizontal centerline of the gate to the top of the gate chamber (manhole) unless noted otherwise.
- (d) Cover: One piece cast iron with lifting eye for manual operation.
- (e) Links: Complete with grease nipples at pivot points and adjusting screws to align seating faces.
- (f) Pivot Lugs: One piece cast iron adjustable in the horizontal plane without removal of cover, complete with grease nipples.
- (g) Flap Gate Size:
- (i) Manhole MH 1: 750mm diameter – Round.
- (ii) Manhole MH 2: 600mm diameter – Round
- (iii) Manhole MH 3: 750mm diameter – Round
- (h) Acceptable Leakage 1.24 litres per metre of seated perimeter per minute at the specified design head.
- (i) Frame and cover shall be painted with two coats of Amerlock 2 or Intergard FP, 150 µm per coat dry film thickness.
- (j) The flap gate shall be as manufactured by Mueller, Waterman, Rodney Hunt, Hydro Gate or approved equal in accordance with B7.
- E29.4 Materials
- (a) Cast Iron Pieces: ASTM A48 Cast Iron (Class 30) or ASTM A126 Cast Iron (Class B)
- (b) Seating Faces: ASTM B21 Naval Bronze, Alloy 482
- (c) Links: Cast Iron or high tensile Bronze B584 – C865
- (d) Bushings: Bronze B584, Alloy 932

- (e) Hinge Pins: ASTM A276, Type 304 Stainless Steel or Silicon Bronze B98-CA655
- (f) Fasteners: ASTM A276, Type 304 Stainless Steel
- (g) Grease Nipples: Stainless Steel
- (h) Shop Drawings: Submit shop drawings for cast iron flap gate and wall thimble in accordance with specification section "01 33 00 Submittal Procedures".

E29.5 Construction Methods

E29.5.1 Shop Testing

- (a) The fully assembled flap gate shall be shop inspected, adjusted and tested for operation and leakage at the design head before shipping.
- (b) Provide heating as specified in E31 during epoxy adhesive curing time.

E29.5.2 Delivery and Shipping

- (a) The Contract Administrator will examine the flap gates and wall thimbles upon delivery and will reject any equipment that is found to be damaged to the extent that, in the Contract Administrator's opinion, it cannot be put to the use for which it was intended. The Contractor shall arrange with the gate supplier to repair any superficially damaged equipment to the satisfaction of the Contract Administrator.
- (b) It shall be the responsibility of the Contractor to negotiate any claims for damage with the carrier and to make arrangements to have any rejected equipment replaced as soon as possible at no extra expense to the City.

E29.5.3 Installation

- (a) The flap gate shall be installed in accordance with the Manufacturer's specifications.
- (b) Make arrangements to have a qualified field representative of the flap gate supplier/manufacturer inspect the installation during and after completion and provide a Certificate of Satisfactory Installation to the Contract Administrator.

E29.5.4 Field Testing

- (a) Arrange for a qualified field representative of the flap gate supplier/manufacturer to be present during field testing.

E29.6 Measurement and Payment

- E29.6.1 Supply, delivery and installation of a cast iron flap gate and thimble be measured and paid for at the Contract Lump Sum Price for "Cast Iron Flap Gate Supply, Delivery and Installation Inside New Manhole" for each respective size identified on Form B: Prices, executed in accordance with this specification and accepted by the Contract Administrator.

Add: E33

E33. OUTFALL PIPE LOADING

- E.33.1 The Contractor shall exercise caution when crossing the existing outfall pipes running west underneath the site perimeter roadway running along the west side of the site.

- E33.2 The maximum allowable loading over the outfall pipes is HS28 (CL800) live highway loading. The Contractor shall be responsible for ensuring that loading over the outfall pipes does not exceed the aforementioned limit during construction.
- E33.3 If the Contractor needs to transport equipment, materials or any load exceeding the limit specified in E33.2 to a location south of the outfall pipes, the Contractor shall use an alternate route along Ed Spencer Drive along the east side of the site.
- E33.4 If using an alternate route along Ed Spencer Drive is not feasible such that a route over the outfall is the only viable option, the Contractor shall notify the Contract Administrator and be responsible for hiring a professional engineer to design temporary bridging over the outfall pipes, suitable for the required design load, and installing the temporary bridging prior to transport of the required load.
- E33.5 If the Contractor chooses to install temporary bridging over the outfall pipes, the design shall be prepared by a professional engineer and submitted to the Contract Administrator for review and approval prior to construction of the temporary bridging.
- E33.6 Any temporary bridging over the outfall pipes to facilitate excessive loading above the load specified in E33.2 shall be incidental to the Contractor's prices for the work. No additional payment shall be made for temporary bridging over the outfall pipes.
- E33.7 If the Contractor chooses to install temporary bridging over the outfall pipes, the bridging shall be removed upon completion of the contract and the roadway restored to equal or better condition than it was prior to installation of the temporary bridging over the outfall pipes.

Measurement and Payment

- E33.8 No additional payment shall be made for protection of the outfall pipes or installation of temporary bridging over the outfall pipes. Such work shall be incidental to the Contractor's prices for work on this project.

Add: E34

E34. JERSEY BARRIERS

- E.34.1 The Contractor shall supply and install jersey barriers parallel to shoring on west side of the bioreactor excavation per the location indicated on the design drawings.
- E34.2 Jersey barriers shall be standard 810mm tall by 3000mm long barriers.
- E34.3 The Contractor shall submit shop drawings for approval by the Contract Administrator in accordance with specification section "01 33 00 Submittal Procedures".

Measurement and Payment

- E34.4 Supply and installation of jersey barriers shall be at the Contract unit price for "Jersey Barriers" for each jersey barrier supplied and installed in accordance with this specification.

Add: E35

E35. REFLECTIVE CHANNEL POSTS

E.35.1 The Contractor shall supply and install reflective channel posts on both sides of the site Construction Access Roadways, as indicated on the design drawings

E.35.2 Reflective Channel posts shall meet the following specifications:

- i) Posts shall be 8 foot long galvanized steel channel posts.
- ii) Posts shall be embedded minimum 600mm below finished grade.
- iii) A reflective marker panel shall be affixed to both sides of the top of the channel post. The reflective marker shall be a 15cm wide x 30cm tall, 2mm thick aluminum panel coated in reflective sheeting. One marker panel shall be securely bolted to each each side of the channel post such that panels are visible from both directions of traffic.
- iv) Reflective sheeting affixed to the aluminum panel shall be high-intensity prismatic reflective sheeting.
- v) Channels shall be spaced at 10.0m O.C. on both sides of the roadways.
- vi) Posts shall be spaced 2.4m O.C. on radii of Construction Access Roadway and Seniuk Road.
- vii) The Contractor shall submit shop drawings for approval by the Contract Administrator in accordance with specification section "01 33 00 Submittal Procedures".

Measurement and Payment

E35.3 Supply and installation of reflective channel posts shall be at the Contract unit price for "Reflective Channel Posts" for each reflective channel post supplied and installed in accordance with this specification.

Add: E36.

E36. CULVERT DEBRIS GRATES

E.36.1 The Contractor shall supply and install culvert debris grates on the upstream end of culverts at locations indicated on the design drawings.

E36.2 Debris grates shall be manufactured and installed in accordance with the detail indicated on drawing 1-0102-DTL-A001-003.

E36.3 The Contractor shall submit shop drawings for approval by the Contract Administrator in accordance with specification section "01 33 00 Submittal Procedures".

Measurement and Payment

E36.4 Supply and installation of culvert debris grates shall be at the Contract unit price for "Culvert Debris Gate – 600mm diameter" and "Culvert Debris Gate – 750mm diameter" for each debris grate supplied and installed in accordance with this specification.

Add: E37.

E37. 450mm DIA CULVERT FLAP GATE

- E.37.1 The Contractor shall supply and install a 450mm diameter flap gate on the downstream end of a 450mm diameter CSP culvert, as shown on drawing 1-0102-CRSW-A002-003.
- E37.2 The flap gate shall be a circular medium duty gate capable of with standing seating heads up to 6.0metres. The medium duty flap gate shall be an Armtec Model 20C Flap Gate or an equivalent gate Manufactured by Mueller, Waterman, Rodney Hunt, Hydro Gate, or approved equal in accordance with B7.
- E37.3 The Contractor shall submit shop drawings for approval by the Contract Administrator in accordance with specification section "01 33 00 Submittal Procedures".
- E37.4 The flap gate shall be installed securely to the corrugated steel pipe culvert in accordance with the Manufacturer's specifications. The Contractor shall make arrangements to have a qualified field representative of the flap gate supplier/manufacturer inspect the installation during and after completion and provide a Certificate of Satisfactory Installation to the Contract Administrator.

Measurement and Payment

- E37.5 Supply and installation of the 450mm diameter flap gate on the end of a culvert shall be at the Contract unit price for "450mm dia Flap Gate" for each flap gate supplied and installed in accordance with this specification. It shall include all labour, materials and equipment required to install the flap gate.

Add: E38.

E38. WHEEL STOPS

- E.38.1 The Contractor shall supply and install wheel stops within designated parking areas on the design drawings.
- E38.2 Wheels stops shall be standard 2.44m (8 ft) long by 150mm (6 inches) tall precast concrete wheel stops or railway ties of the same dimensions. The wheel stops shall be anchored to the ground at each end of the wheel stop using 15m rebar, as indicated on the design drawings.

Measurement and Payment

- E38.3 Supply and installation of wheel stops shall be at the Contract unit price for "Supply and Install Wheel Stops" for each wheel stop supplied and installed in accordance with this specification. Price shall include all labour, materials and equipment necessary to perform the work.

Add: E39.

E39. GROUNDWATER LEVELS

- E.39.1 KGS Group has performed monitoring of water levels and readings have increased 0.5 to 1.0m since March 2014. This does not change any concerns about basal heave from bedrock groundwater. There are some perched water levels in the silty-clay areas that will require dewatering by the Contractor. Cost for dewatering shall be incidental to excavation work and shall be performed in accordance with E7. No additional payment will be made for dewatering of excavations.

Add: E40.

E40. DITCH INLET GRATE

- E.40.1 The Contractor shall supply and install dome-shaped ditch inlet grate on top of CB 1. The ditch inlet grate shall be per the detail "Ditch Catchbasin – Inlet Grate Detail" on drawing 1-0102-CDRN-Y001-002.

- E40.2 The Contractor shall submit shop drawings for approval by the Contract Administrator in accordance with specification section "01 33 00 Submittal Procedures".

Measurement and Payment

- E40.3 Supply and installation of the ditch inlet grate on CB 1 shall be at the Contract unit price for "Supply and Install Ditch Inlet Grate" and shall include all labour, materials and equipment required to supply and install the grate in accordance with this specification.

DRAWINGS

Replace:

- 333-2014_Drawing_C1-IndexSheet-R00 with 333-2014_Addendum_1-Drawing_C1-IndexSheet-R01
- 333-2014_Drawing_1-0102-SFDW-G002-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-G002-R01
- 333-2014_Drawing_1-0102-SFDW-R001-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-R001-R01
- 333-2014_Drawing_1-0102-SFDW-R002-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-R002-R01
- 333-2014_Drawing_1-0102-SFDW-R003-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-R003-R01
- 333-2014_Drawing_1-0102-SFDW-R004-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-R004-R01
- 333-2014_Drawing_1-0102-SFDW-S003-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-S003-R01
- 333-2014_Drawing_1-0102-SFDW-C001-R00 with 333-2014_Addendum_1-Drawing_1-0102-SFDW-C001-R01
- 333-2014_Drawing_1-0102-MUTY-Y001-R00 with 333-2014_Addendum_1-Drawing_1-0102- MUTY-Y001-R01
- 333-2014_Drawing_1-0102-CDRN-Y001-001-R00 with 333-2014_Addendum_1-Drawing_1-0102-CDRN-Y001-001-R01
- 333-2014_Drawing_1-0102-CDRN-Y001-002-R00 with 333-2014_Addendum_1-Drawing_1-0102-CDRN-Y001-002-R01
- 333-2014_Drawing_1-0102-CGAD-A001-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A001-001-R01
- 333-2014_Drawing_1-0102-CGAD-A002-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A002-001-R01
- 333-2014_Drawing_1-0102-CGAD-A002-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A002-002-R01
- 333-2014_Drawing_1-0102-CGAD-A003-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-001-R01
- 333-2014_Drawing_1-0102-CGAD-A003-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-002-R01
- 333-2014_Drawing_1-0102-CGAD-A003-003-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-003-R01
- 333-2014_Drawing_1-0102-CGAD-A003-004-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-004-R01

333-2014_Drawing_1-0102-CGAD-A003-005-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-005-R01

333-2014_Drawing_1-0102-CGAD-A003-006-R00 with 333-2014_Addendum_1-Drawing_1-0102- CGAD-A003-006-R01

333-2014_Drawing_1-0102-CRSW-A001-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CRSW-A001-001-R01

333-2014_Drawing_1-0102-CRSW-A001-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CRSW-A001-002-R01

333-2014_Drawing_1-0102-CRSW-A002-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CRSW-A002-001-R01

333-2014_Drawing_1-0102-CRSW-A002-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CRSW-A002-002-R01

333-2014_Drawing_1-0102-CUTY-Y006-001-R00 with 333-2014_Addendum_1-Drawing_1-0102- CUTY-Y006-001-R01

333-2014_Drawing_1-0102-CUTY-Y006-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CUTY-Y006-002-R01

333-2014_Drawing_1-0102-CUTY-Y007-002-R00 with 333-2014_Addendum_1-Drawing_1-0102- CUTY-Y007-002-R01

333-2014_Drawing_1-0102-CUTY-Y007-003-R00 with 333-2014_Addendum_1-Drawing_1-0102- CUTY-Y007-003-R01

333-2014_Drawing_4-0102-CGAD-A001-001-R00 with 333-2014_Addendum_1-Drawing_4-0102- CGAD-A001-001-R01

333-2014_Drawing_4-0102-CGAD-A001-004-R00 with 333-2014_Addendum_1-Drawing_4-0102- CGAD-A001-004-R01

Add: 333-2014_Drawing_1-0102-SFDW-K001-R00
333-2014_Drawing_1-0102-SFDW-K002-R00